

Production - Natural Gas STAR Annual Report - 2006

Company Information

Company Name: **Marathon Oil Company**
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Company Information Updated: No

Activities Reported

BMP1: No BMP2: No BMP3: Yes

Total Methane Emission Reductions Reported This Year: **186,192**

Previous Years' Activities Reported: **No**

Period Covered by Report

From: **01/01/2006**

To: **12/31/2006**

Additional Comments

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Marathon Oil Company

BMP1: Identify and Replace High-Bleed Pneumatic Devices

Current Year Activities

A. Facility Summary

Number of devices replaced this reporting period: _____ devices

Percent of system now equipped with low/no-bleed units: _____ %

B. Cost Summary

Estimated cost per replacement (including equipment and labor): \$ _____

C. Methane Emissions Reduction

Method Used: _____

Data Source: _____

Methane Emissions Reduction: _____ Mcf/year

D. Duration of Activity

Number of years that methane emissions reductions will be realized: 7 years

E. Total Value of Gas Saved

Value of Gas Saved: \$ _____

\$ / Mcf used: \$ 7.00

F. Planned Future Activities

Number of high-bleed devices to be replicated next year: _____ devices

Previous Years' Activities

Year	Number of Devices	Total Cost * (\$)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved (\$)
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* Total cost of replacements (including equipment and labor)

Additional Comments

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Marathon Oil Company
BMP3: Partner Reported Opportunities (PROs)
Install plunger lift systems in gas wells
Current Year Activities

A. Description of PRO

The wells are evaluated to determine if this technology is the best way to reduce emissions. A well becomes a candidate once the flowrate & well pressure are

unable to unload all of the fluids in the well. The traditional way to unload a well is to open it up to the atmosphere. Installing a plunger lift allow us to avoid venting the well to the atmosphere.

B. Level of Implementation

Number of units installed: **102 units**

C. Methane Emissions Reduction

Methane Emissions Reduction: **178,744.00 Mcf/year**

Basis for the emissions reduction estimate: **Other**

This is a combination of field knowledge and EPA guidance document.

D. Duration of PRO

Number of years that methane emissions reductions will be realized: **10 years**

E. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): **\$ 1,020,000**

F. Total Value of Gas Saved

Value of Gas Saved: **\$ 1,251,208.00**

\$ / Mcf used: **\$ 7.00**

G. Planned Future Activities

To what extent do you expect to implement this PRO next year?:

All of our wells are constantly evaluated to determine if they are candidates for this technology.

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * (\$)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved (\$)
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* Total cost of practice/activity (including equipment and labor)

Additional Comments

Reduces employee exposure to gas well emissions, dramatically reduces the downtime, reduces the overall emissions to the atmosphere and reduces the amount of employee time spent on each well.

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Marathon Oil Company
BMP3: Partner Reported Opportunities (PROs)
Other: EXCAPE Well Completion Technology
Current Year Activities

A. Description of PRO

This technology allows us to complete multiple zones in one well at the same time rather than completing one zone at a time. By doing this the amount of time to clean-up the well by opening it up to the atmosphere is dramatically reduced thus reducing the amount of natural gas emissions released into the atmosphere.

B. Level of Implementation

This method of well completion was applied on two wells in 2006.

C. Methane Emissions Reduction

Methane Emissions Reduction: **7,448.00 Mcf/year**

Basis for the emissions reduction estimate:

Other

(Number of Frac Stages) x (Estimated Venting per Day, per Stage) x (Number of Venting Days per Stage) - (Actual EXCAPE Venting) = Reduction In Venting

D. Duration of PRO

Number of years that methane emissions reductions will be realized: **1 years**

E. Cost Summary

Estimated cost of implementing the PRO (including equipment and labor): **\$ 3,400,000**

F. Total Value of Gas Saved

Value of Gas Saved: **\$ 52,136.00**

\$ / Mcf used: **\$ 7.00**

G. Planned Future Activities

To what extent do you expect to implement this PRO next year?:

Each well is evaluated to determine if they are candidates for this technology.

Previous Years' Activities

Year	Frequency of practice or # of Installations	Total Cost * (\$)	Estimated Reductions (Mcf/Yr)	Value of Gas Saved (\$)
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* Total cost of practice/activity (including equipment and labor)

Additional Comments

Reduces employee exposure to gas well emissions, reduces the overall emissions to the atmosphere, and gets the well on production faster.

The true cost of implementing this technology would be the difference between conventional completion and EXCAPE completion.

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Additional Accomplishments

May 10, 2007